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(全 11 頁)

⑮ ビロロ [3,2,1-ij] キノリン-5-カルボン
酸誘導体

⑯ 特 願 昭56-63170

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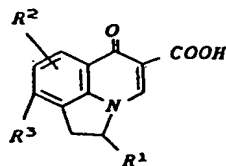
㉓ 代 理 人 弁理士 三枝英二 外2名

明 細 書

発明の名称 ビロロ [3,2,1-ij] キノリン-5-
カルボン酸誘導体

特許請求の範囲

(1) 一般式



(式中 R^1 は水素原子又は低級アルキル基を、
 R^2 は水素原子又はハロゲン原子を、 R^3 は 1-
ビロリジニル基、モルホリノ基、チオモル
ホリノ基、1,2,5,6-テトラヒドロ-1-ビ
リジニル基、1-ビペリジニル基、又は置換基
としてオキソ基もしくはハロゲン置換低級ア

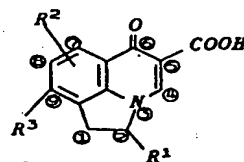
ルキル基を有する 1-ビペラジニル基を示す)

で表わされる ビロロ [3,2,1-ij] キノリン-
5-カルボン酸誘導体及びその塩。

発明の詳細な説明

本発明は新規な ビロロ [3,2,1-ij] キノリン-
5-カルボン酸誘導体に関する。

本発明の ビロロ [3,2,1-ij] キノリン-5-
カルボン酸誘導体は、文献未載の新規化合物であ
つて下記一般式 (1) で表わされる。



(1)

(式中 R^1 は水素原子又は低級アルキル基を、
 R^2 は水素原子又はハロゲン原子を、 R^3 は 1-

F432 F433 F553 F653 F740 G010 G019 G100 H100 H101 H102 H103 H121
H122 H141 H2 H201 H211 H401 H402 H421 H422 H481 H521 H522 H601 H602
H603 H604 H608 H609 H641 H681 H682 H683 H684 H685 H686 H689 J0 J011
J012 J013 J1 J111 J221 J222 J311 J312 J321 J322 J5 J521 J522 J523
L941 M123 M129 M132 M135 M139 M210 M211 M212 M213 M214 M215 M216
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M353 M373 M391 M412 M511 M521 M530 M531 M532 M540 M630 M640 M650
M710 M903 P220

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PN=JP 57176987

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| 1 | 1 | PN=JP 57176985 |
| 2 | 1 | PN=JP 57176986 |
| 3 | 1 | *PN=JP 57176987 |
| 4 | 1 | PN=JP 57176988 |
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| 8 | 1 | PN=JP 57176992 |
| 9 | 1 | PN=JP 57176993 |
| 10 | 1 | PN=JP 57176994 |
| 11 | 1 | PN=JP 57176995 |
| 12 | 1 | PN=JP 57176996 |

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S2 1 PN="JP 57176987" ✓

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IPI Acc No: 1982-22102E/198212

6,7-Dihydro 1-oxo 1H,5H-benzo(I,J)-quinolizine-2-carboxylic acids - and
1,2-dihydro 6-oxo-pyrrolo(3,2,1-I,J) quinoline-5-carboxylic acid derivs.
are antibacterials

Patent Assignee: OTSUKA PHARM CO LTD (SAKA)

Inventor: ISHIKAWA H; KANO M; NAKAGAWA K; UNO T

Number of Countries: 020 Number of Patents: 032

Patent Family:

| Patent No | Kind | Date | Applicat No | Kind | Date | Week | |
|-------------|------|----------|-------------|------|----------|--------|---|
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| GB 2086905 | A | 19820519 | GB 8133890 | A | 19811110 | 198220 | |
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| 193457 | B | 19990701 | NL 815075 | A | 19811110 199931 |

Priority Applications (No Type Date): JP 8163170 A 19810424; JP 80158652 A 19801110; JP 80158625 A 19801110

Patent Details:

| Patent No | Kind | Lan | Pg | Main IPC | Filing Notes |
|-----------|------|-----|----|-------------|--------------|
| E 891046 | A | | 85 | | |
| L 193457 | B | | | C07D-471/04 | |

Abstract (Basic): BE 891046 A

Pyrrolo (3,2,1-ij)-quinoline-5-carboxylic acid derivs. and tetra-hydro benzo (ij) quinolizine-2 -carboxylic acid derivs. of formula (I) and their salts are new. R1 is H or lower alkyl; R2 is H or halo; R3 is pyrrolidino (opt. substd. by hydroxymethyl), 1,2,5,6-tetrahydro-1-pyridyl, piperazino substd. by oxo or halo lower alkyl or a (R4)m-subst. morpholino, thiamorpholino or piperidino gp. of formula (A); R4 is H, lower alkyl, lower alkoxy, hydroxy, phenyl lower alkyl, lower alkanoyloxy, amino opt. substd. by lower alkyl or lower alkanoyl, oxo or carbamoyl; Z is O, S or -CH2-; m is 1 or 2 and n is 1 or 2. With the condition that when n is 2, then R3 is not halo-alkyl substd.-piperazino.

(I) are antibacterials effective against gram positive and gram-negative strains resistant to classical antibiotics, such as penicillins, cephalosporins, streptomycin, etc., and which have low toxicity to mammals and fish. MIC tests are described. (I) may be administered orally, rectally or parenterally or used as sterilising agents or antiseptics. Usual doses are 0.2-100 mg/kg taken 3-4 times daily.

Title Terms: DI; HYDRO; OXO; BENZO; QUINOLIZINE; CARBOXYLIC; ACID; DI; HYDRO; OXO; PYRROLO; QUINOLINE; CARBOXYLIC; ACID; DERIVATIVE; ANTIBACTERIAL

Derwent Class: B02

International Patent Class (Main): C07D-471/04

International Patent Class (Additional): A61K-031/395; A61K-031/43; A61K-031/47; C07D-209/00; C07D-215/22; C07D-221/00; C07D-455/00;

C07D-471/06; C07D-487/04; C07D-487/06

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| E3 | 1 | *PN=JP 02188570 |
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